

# Scientific Analysis Administrative Change Notice

Complete only applicable items.

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4. Title:	In Situ Field Testing of Processes				
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6. Approvals:	
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7. Affected Pages	8. Description of Change:
6-350	<p>Editorial Change</p> <p>Table 6-42 "Tritium Activities Found in Samples from Locations in the ESF and ECRB", page 6-350, 2<sup>nd</sup> column entitled "Interval (ft)", 4<sup>th</sup> row for "ESF-NR-MOISTSTDY#10", change:</p> <p>4.6 – 6.5 To 4.0-6.5</p> <p>This change was identified in Impact Review Action Notice (IRAN) 5535-A</p>
6-352	<p>Editorial Change</p> <p>Table 6-42 "Tritium Activities Found in Samples from Locations in the ESF and ECRB", page 6-352, 2<sup>nd</sup> column entitled "Interval (ft)", 17<sup>th</sup> row for "ECRB-SYS-CS1750<sup>C</sup>", change:</p> <p>5.5 – 5.9 To 3.3 – 5.9</p> <p>This change was identified in Impact Review Action Notice (IRAN) 5527-A</p>

Table 6-42. Tritium Activities Found in Samples from Locations in the ESF and ECRB (Continued)

Borehole Name <sup>a</sup>	Interval (ft)	Tritium (TU)	Tritium Error (TU)
ESF-AL#2-HPF#1	83.6 - 83.8	32.9	4.3
ESF-LPCA-MOISTSTDY#02	6.4 - 7.0	<0.1	0.2
ESF-NR-MOISTSTDY#03	4.4 - 5.0	0.2	0.4
ESF-NR-MOISTSTDY#10	4.0 - 6.5	0.2	0.2
ESF-DHW-CIV#01 <sup>b</sup>	10.9 - 13.2	1.0	0.4
ESF-DHW-CIV#02 <sup>b</sup>	6.5 - 8.2	0.5	0.7
ESF-DHW-CIV#03 <sup>b</sup>	12.0 - 13.3	1.6	0.4
ESF-DHW-CIV#04 <sup>b</sup>	12.3 - 13.7	0.9	0.3
ESF-DHW-CIV#05 <sup>b</sup>	26.7 - 28.7	0.7	0.3
ESF-DHW-CIV#06 <sup>b</sup>	12.2 - 13.9	0.5	0.3
ESF-DHW-CIV#07 <sup>b</sup>	9.6 - 11.0	1.6	0.4
ESF-DHW-CIV#08 <sup>b</sup>	11.7 - 13.1	0.2	0.5
ESF-DHW-CIV#09 <sup>b</sup>	11.5 - 12.5	0.6	0.6
ESF-DHW-CIV#10 <sup>b</sup>	11.2 - 12.4	0.9	0.2
ESF-SD-CIV#01 <sup>b</sup>	11.5 - 12.6	0.5	0.4
ESF-SD-CIV#02 <sup>b</sup>	8.0 - 9.9	0.1	0.3
ESF-SD-CIV#03 <sup>b</sup>	10.7 - 11.4	0.6	0.3
ESF-SD-CIV#04 <sup>b</sup>	11.8 - 13.4	0.3	0.4
ESF-SD-CIV#05 <sup>b</sup>	7.9 - 9.7	0.7	0.2
ESF-SD-CIV#06 <sup>b</sup>	9.3 - 10.5	1.1	0.5
ESF-SD-CIV#07 <sup>b</sup>	8.1 - 9.7	0.3	0.4
ESF-SD-CIV#08 <sup>b</sup>	7.9 - 9.9	0.6	0.3
ESF-SD-CIV#09 <sup>b</sup>	10.1 - 11.5	0.2	0.3
ESF-SD-CIV#10 <sup>b</sup>	11.8 - 13.0	0.4	0.3
ESF-SD-CIV#11 <sup>b</sup>	11.0 - 12.5	0.2	0.3
ESF-SD-CIV#12 <sup>b</sup>	11.8 - 13.4	0.2	0.3
ESF-SD-CIV#13 <sup>b</sup>	30.5 - 32.3	0.6	0.4
ESF-SD-CIV#14 <sup>b</sup>	11.6 - 13.4	<0.1	0.2
ESF-SD-CIV#15 <sup>b</sup>	12.0 - 13.5	0.6	0.5
ESF-SD-CIV#16 <sup>b</sup>	12.0 - 13.2	0.2	0.3
ESF-SD-CIV#17 <sup>b</sup>	10.5 - 12.0	1.0	0.3
ESF-SD-CIV#17 <sup>b</sup>	12.0 - 13.2	0.7	0.4
ESF-SD-CIV#18 <sup>b</sup>	10.9 - 11.8	1.4	0.8
ESF-SD-CIV#18 <sup>b</sup>	12.3 - 13.5	2.6	0.5
ESF-SD-CIV#19 <sup>b</sup>	11.7 - 13.1	0.6	0.4
ESF-SD-CIV#20 <sup>b</sup>	10.5 - 13.0	<0.1	0.2
ESF-SD-CIV#21 <sup>b</sup>	9.8 - 11.1	0.4	0.3
ESF-SD-CIV#22 <sup>b</sup>	10.4 - 11.2	0.2	0.3
ESF-SD-CIV#23 <sup>b</sup>	12.6 - 13.7	0.2	0.3
ESF-SD-CIV#24 <sup>b</sup>	12.1 - 13.4	0.4	0.3
ESF-SD-CIV#25 <sup>b</sup>	8.7 - 9.9	0.2	0.4
ESF-SD-CIV#26 <sup>b</sup>	12.2 - 13.2	0.1	0.4
ESF-SD-CIV#27 <sup>b</sup>	12.0 - 13.4	0.2	0.2
ESF-SD-CIV#28 <sup>b</sup>	8.0 - 11.3	1.1	0.3
ESF-SD-CIV#29 <sup>b</sup>	10.7 - 12.2	0.3	0.2
ESF-SD-CIV#30 <sup>b</sup>	12.2 - 13.4	0.2	0.3

Table 6-42. Tritium Activities Found in Samples from Locations in the ESF and ECRB (Continued)

Borehole Name <sup>a</sup>	Interval (ft)	Tritium (TU)	Tritium Error (TU)
ESF-SR-MOISTSTDY#38	5.9 - 6.8	1.7	0.3
ESF-SR-MOISTSTDY#40	5.9 - 6.9	0.6	0.2
ECRB-SYS-CS0600 <sup>c</sup>	3.2 - 6.0	0.8	0.3
ECRB-SYS-CS0750 <sup>c</sup>	3.6 - 6.2	6.2	0.5
ECRB-SYS-CS0800 <sup>c</sup>	2.9 - 5.8	1.7	0.3
ECRB-SYS-CS0900 <sup>c</sup>	3.5 - 6.4	6.5	0.6
ECRB-SYS-CS0950 <sup>c</sup>	2.8 - 5.6	6.1	0.4
ECRB-SYS-CS1000 <sup>c</sup>	17.4 - 18.2	0.5	0.3
ECRB-SYS-CS1200 <sup>c</sup>	2.9 - 6.9	0.4	0.2
ECRB-SYS-CS1300 <sup>c</sup>	3.0 - 5.5	0.7	0.7
ECRB-SYS-CS1350 <sup>c</sup>	3.6 - 6.4	3.8	0.5
ECRB-SYS-CS1450 <sup>c</sup>	4.0 - 6.5	0.3	0.5
ECRB-SYS-CS1500 <sup>c</sup>	4.3 - 7.1	10.3	0.9
ECRB-SYS-CS1500 <sup>c</sup>	9.5 - 12.1	1.5	0.4
ECRB-SYS-CS1500 <sup>c</sup>	14.4 - 17.4	2.5	0.4
ECRB-SYS-CS1600 <sup>c</sup>	3.4 - 4.3	1.7	0.9
ECRB-SYS-CS1750 <sup>c</sup>	3.3 - 5.9	0.6	0.4
ECRB-SYS-CS1800 <sup>c</sup>	3.6 - 6.1	0.1	0.8
ECRB-SYS-CS1950 <sup>c</sup>	4.0 - 6.5	3.6	0.5
ECRB-SYS-CS2000 <sup>c</sup>	11.0 - 11.9	0.1	0.5
ECRB-SYS-CS2150 <sup>c</sup>	3.4 - 4.1	<0.1	0.9
ECRB-SYS-CS2150 <sup>c</sup>	5.5 - 6.7	9.8	0.5
ECRB-SYS-CS2250 <sup>c</sup>	2.9 - 3.9	0.8	0.4
ECRB-SYS-CS2500 <sup>c</sup>	16.7 - 19.8	0.6	0.3

Source: DTNs: GS990183122410.001 [DIRS 146125]; GS020408312272.002 [DIRS 162342]; GS021208312272.005 [DIRS 162934]; GS030208312272.001 [DIRS 162935].

<sup>a</sup> Borehole location designations are as follows:

ESF-AL#2 (Bow Ridge fault), EDF-LPCA-MOISTSTDY (Alcove 4), ESF-NR-MOISTSTDY (ESF north ramp), ESF-DHW-CIV (Drill Hole Wash fault), ESF-SD-CIV (Sundance fault), ESF/NAD/GTB#1A (Alcove 6 access drift), ESF-AL6 (Alcove 6), ESF/SAD/GTB#1 (Alcove 7 access drift), ESF-SR-MOISTSTDY (ESF south ramp), and ECRB-SYS (ECRB systematic testing).

<sup>b</sup> Validation Study (VS) boreholes.

<sup>c</sup> The last four digits of the borehole name correspond to the ECRB station number, which indicates distance from the ESF main drift (e.g., Borehole ECRB-SYS-CS0600 is located at ECRB station 06+00, which is 600 m from the ESF main drift).

### 6.14.2.3 Reconstruction of the Paragenetic Sequence and Thermal History of Fracture-Hosted Secondary Mineral Deposits

Detailed mapping of the secondary mineral deposits has shown that in high-angle fracture settings, the deposits generally are restricted to the fracture footwalls; in cavity settings, deposits are restricted to the cavity floors. The mineral coatings typically are:

1. Heterogeneously distributed, and found on less than 10 percent of open fractures and cavities,
2. Discontinuous and patchy within fractures,